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The Violence Prevention Community Meeting: A Multi-Site Study

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Abstract

Objective—The Violence Prevention Community Meeting (VPCM) is a specialized form of community meeting in which avoiding violence and promoting non-violent problem solving and interpersonal civility are focal points. A nationwide study to assess the VPCM as an effective intervention to reduce workplace violence was undertaken.

Participants—Seven acute locked psychiatric units of the Veterans Health Administration (VHA) throughout the United States participated in the study.

Methods—All patients and all staff on the seven in-patient locked psychiatry units participated in the intervention (VPCM) or as a control (treatment as usual). The study was 21 weeks at each site. The three time periods were pre-treatment weeks 1 – 3, treatment weeks 4 – 18, and post-treatment weeks 19 – 21. The VPCM was conducted during the treatment weeks.

Results—Overall rates of aggression declined by 0.6% (95%CI: –5.6%, 6.5%; nonsignificant) per week in the intervention hospitals and by 5.1% (95%CI: 0.4%, 9.6%; significant) per week for the control hospitals.

Conclusions—Aggression decreased for both the intervention and control hospitals which could be due to enrollment in a research study and thus being more aware of their ability to address workplace violence at their site.

The Violence Prevention Community Meeting (VPCM) was developed from a Kuhn Paradigm or an “aha” moment. Planning sessions initially focussed only on aggression, violence and assault.

INTRODUCTION

The community meeting of today is a frequent regular meeting in a psychiatric ward or institution which is attended by all staff and patients. It meets for the purpose of communication, ward management, and psychiatric treatment. The conditions of the current hospital psychiatric treatment environment are very different from the treatment environment in which the therapeutic community concept was first established, particularly in terms of the shortened length of hospital stay and the emphasis on pharmacologic rather than the psychotherapeutic methods of treatment. However, even with these changes, an admixture of psychopharmacologic treatment and therapeutic community principles has been advocated as an effective, realistic, and desirable treatment modality in today's hospital environment (Buchele, 2015; Klein & Schermer 2015; Rice 2015; Schermer, 2015; Yalom & Leszcz 2005). A synthesis of an extensive literature review from both a theoretical and research perspective on the community meeting is presented. The literature search for the last three years included PubMed, CINAHL, PsycInfo, and PsycArticles.

Historical research

The origin of the community meeting can be traced to ancient times when the primary family or tribe came together to solve problems of common interest (Berczeller, 1984). The old town meeting had a similar function (Rubin, 1979). The use of the community meeting in psychiatry began with Thomas F. Main's (1946) introduction of a therapeutic community at Northfield Military Hospital in Birmingham where he conceived a therapeutic setting with a spontaneous and emotionally structured (rather than a medically dictated) organization in which all staff engaged. In the 1950s, Maxwell Jones (1952) incorporated Main's ideas and began his therapeutic community in Belmont, MA.

There is little consensus in the literature on the procedure for conducting a community meeting. Because Jones did not set a fixed method, format, or direction for community meetings, they took on divergent forms and varied names: "Ward Meeting" (Roberts, 1960), "Therapeutic Community Meeting" (Doherty, 1974), "Ward Group Meeting" (Maratos & Kennedy, 1974), "Patient-staff Community Meeting" (Klein, 1981, Klein & Brown, 1987), and "Staff-Patient Meeting" (Gelin, Hawet, Warguy-Citti, Lesage, & Pascalis, 1987). In systems terms (von Bertalanffy, 1968), the community meeting is the largest sub-system within the hospital.

The leadership style debate began early. Jones' (1952) concept of leadership was a democratic style, whereas Wilmer's (1958) was autocratic. The contradiction between the advocated strong role of the staff leader and the purported atmosphere to encourage the patients' take over prevails even today (Klein & Schermer 2015).

Rice (1993, 2015) advocated the use of three metaphors to describe the dynamics of a community meeting: town meeting, family meeting, and theater. He suggested that the

community meeting is like a town meeting because it is concerned with the aspect of community management and addresses and performs numerous tasks essential to the running of the community. It is the art of the possible in a hospital setting. He also suggested that it is like a family meeting in that it addresses the pleasures, conflicts, attractions, dislikes, loves, fears, and angers that arise among and between people who live, work, eat, and sleep under the same roof. Finally, he suggested that the community meeting is like theater in that the patients project onto the meeting with its leadership and staff a variety of unconscious and preconscious concerns and conflicts and identify with the therapists' and staff's response to them, real or imagined.

Regardless of leadership style, the importance of attention to boundaries is deemed essential. Boundaries are those dividing lines that define what is in and what is out (Klein & Brown, 1987; Klein & Schermer, 2015; Peterson, Hanass, Bhana, Goverder, 2014; Rice, 2015). They should be open and permeable enough to allow for information to enter from and, after having been processed, to return to other parts of the hospital. The boundaries should allow for adequate communication among the participants while at the same time remaining firm enough to clearly distinguish the community meeting from other functions in the hospital (Rice, 2015). They should also be firm enough to allow clear distinctions between and among the members and between patients and staff. Rice added that well-maintained boundaries also play an important role in reducing the iatrogenic anxiety, regression, and splitting noted earlier. In doing so, the boundaries prevent the community meeting and the hospital from becoming, in terms of an earlier metaphor, a contaminating environment.

Groups have time, membership, role, and task boundaries and leaders define and regulate both internal boundaries (e.g. how work, tasks, and roles are defined) and external boundaries (e.g. who can attend meetings and the amount of time to be devoted to them) (Klein & Brown, 1987). Arons (1982) also emphasized the importance of establishing and maintaining boundaries and he stated that in rapidly changing acute admission units, this function should reside with the leader. However, in a more stable therapeutic community, the leader may wish to allow the community members to establish their own boundaries, as an exercise to build group cohesion (Klein & Schermer, 2015; Rice 2015).

Many articles claim beneficial results of community meetings but do not offer research data. For example, Woods (1970) and Winston and Papernik (1970) believed that the community meeting had the effect of reducing overt and covert aggression by both staff and patients. Such articles approach outcome analysis from a theoretical or subjective experience viewpoint (Arons, 1982; Bernard, 1983; Buchele, 2015; Klein, 1981; Hopper, 2013; Parish, 2012; Post 2015; Russaskoff & Oldham, 1982; Swenson & Munich, 1989; Volkan, 2004; Winer & Lewis, 1984; Yalom & Leczyz 2005).

Formulating the Violence Prevention Community Meeting (VPCM)

The panel of national experts on assault was asked to identify particular items that they thought to be essential to running a community meeting focused on assault and came up with the following general criteria: purpose of the meeting, criteria for holding the meeting, type of hospital administrative support required, staff and patient roles in the meeting, frequency and duration of the meeting, number and type of participants, conditions for

nonparticipation, criteria for leader and leadership style, content to be addressed, phases of the community meeting, underlying issues be addressed (e.g. limit setting, fear of loss of control, alliance building), and the purpose of post community meeting staff conferences.

A protocol for a Violence Prevention Community Meeting (VPCM) was established (Lanza, Kazis, Lee, Ericsson, 2003).

Further research of the VPCM protocol was recommended to determine if it:

1. was an effective standardized approach to decrease assaultive behavior on inpatient psychiatric units.
2. was cost effective.
3. could be used for short-term stay patients on wards with increasingly rapid turnover.
4. could be utilized by a variety of interdisciplinary mental health staff, and
5. was feasible to teach.

An important point should be noted: According to the panel, the community meeting should be more focused on patient rather than on staff behavior and feelings. This may reflect the obvious fact that the intervention is to be aimed at the patient, not at the staff even though we risk missing the important clinical benefit of appropriate inclusion of staff reactions related to particular assault issues such as feeling angry, omniscient, sick, or avoiding the subject entirely (Lanza, Kazis, Lee, Ericsson, 2003).

Pilot-Test: Efficacy of VPCM to Reduce Patient Violence

The efficacy of the Violence Prevention Community Meeting (VPCM) was tested on an acute inpatient psychiatry unit that had an average patient census of 30 and an average length of stay of 5 days (Lanza, Rierdan, Forester, Zeiss, 2009; Lanza, Rierdan, & Zeiss, 2006a). Nursing staff were trained to lead the VPCM and leadership rotated. Meetings were held twice a week during the day shift; violence prevention was discussed at each meeting.

Analyses compared patient violence across 3 time periods (Pre-test 3 weeks, Transition 4 weeks, Treatment 9 weeks, Post-test 4 weeks) for each of the three shifts. The transition period was not included in the analyses because of the variation in the frequency of the VPCM per week during this period. Since the data were counts of incidents (not scale scores) and non-linear, non-parametric tests using the Poisson models were undertaken. Wald Chi-square tests compared Sum of Weekly violence across three time periods independently for the three shifts and found, for the Day Shift, significant decreases in violence ($p < .01$ or better) from Pre-test to Treatment, from Treatment to Post-test and from Pre-test to Post-test. Most notably, there was a 30% reduction in violence from Pre-test to Treatment and a 50% reduction in violence from Pre-test to Post-test.

The limitations in generalizability from the day shift when meetings were held to other shifts with other staff were the basis for proposing to hold VPCM meetings on evening as well as day shifts. The results of this pilot test provided the empirical basis for this study to establish

the validity of the VPCM in a design that compared treatment and control groups with meetings held on the day shift and evening shift.

METHODS

The aim was to assess the VPCM as an effective intervention to reduce workplace violence in acute care psychiatric units in a nationwide study. Two groups were compared: the VPCM Treatment Group and the Control Group. Each of these groups was held on an acute inpatient locked psychiatry unit in separate hospital facilities. Seven units were randomly assigned to either the Treatment or the Control groups. Human Subject Review Board or Institutional Review Board approval was obtained at NIOSH and at each of the Veterans Health Administration (VHA) sites.

The VPCM was held twice weekly during the day shift and once weekly during the evening shift and incidents of violence were recorded by every staff member on all three shifts for every day of the 21 weeks of the design. Avoiding violence and promoting non-violent problem solving and interpersonal civility were VPCM content topics. Staff conducting the VPCM were required to utilize the following guidelines to conduct each meeting: Section I - Purposes for having VPCM, Section II - Structure, Section III - Content and Phases of the VPCM, Section IV - Process of the VPCM, Section V - Leadership, and Section VI - Expectations and Agreements (Lanza, Kazis, Lee, Ericsson, 2003). The control group held community meetings, which are standard of care in psychiatric units, with open and non-specific structure and content, twice weekly during the day shift and once weekly during the evening shift and every staff member on all three shifts recorded incidents of violence for every day of the 21 weeks of the design. Changes in the violence behavior of patients in the VPCM group as compared to the control groups was assessed in the context of a repeated measures design (PreTreatment vs. Treatment vs. PostTreatment), as outlined below.

Sequence of Phases	Duration	What Happens
Pretreatment:	3 weeks	All Groups: Recording of violence
Treatment:	15 weeks	VPCM conducted; for all Groups: Recording of instances of violence
Posttreatment	3 weeks	VPCM has ended; for all Groups: Recording of instances of violence

Association of potential risk factors (perpetrator diagnoses, sex, age, race/ethnicity) with aggressive incidents was published in May 2015. (Ridenour, Lanza, Hendricks, Hartley, Rierdan, Zeiss, and Amandus, 2015).

MEASURES

Violence Incident Recording

Definition of patient violence—For the purpose of this study, patient violence was defined as any verbal or physical behavior constituting threat of violence, verbal aggression, or physical aggression with body or object (Modified Overt Aggression Scale, Stanley, Welkenfield & Murrill, 1988). Verbal aggression was defined as verbal hostility, such as

statements or invectives that seek to inflict psychological harm on another through devaluation/degradation, and threats of physical attack. Aggression against property was defined as destruction of hospital or others' possessions. Physical aggression was defined as violent action intended to inflict pain, bodily harm, or death upon another.

Real Time Coding—Each nursing staff member was equipped with a two-event tally counter and every time that staff observed an instance of patient violence, he or she depressed one of the two clickers (one for physical aggression or physical aggression against property, the other for verbal aggression) of a two-event counter. Totals were recorded in logs at the end of shifts. If more than one staff person experienced violence towards them during the same incident, only one nurse recorded the incident. Events separated in time were recorded as separate events.

All staff were trained by NIOSH and VHA project leads on criterion in categorizing violence using the Modified Overt Aggression Scale (Stanley, Wolkenfeld, & Murrill, 1988) and in using our Violence Description Matrix to summarize violent events at the end of shifts. A research assistant was on each unit to assist the nursing staff. Due to confidentiality issues, staff demographics were collected once at the beginning of the study; no identifiers were collected.

At the end of each shift, each nursing staff member completed a daily incident form including a Violence Description Matrix (based on the Modified Overt Aggression Scale; Stanley, Wolkenfeld, & Murrill, 1988) for each violent event that occurred during that shift and was recorded using real time coding. Each violent event observed was categorized by the nurse in terms of the level of verbal aggression, physical aggression against property and physical aggression. During the course of the study, rosters were collected to determine the number of staff on duty during each shift.

Daily incident forms completed by nursing staff were sent to National Institute of Occupational Safety and Health (NIOSH) on a weekly basis. The sites kept copies of the data until NIOSH notified them that they have received it. NIOSH staff completed all data entry, database development, and statistical analysis for quality assurance. All hard copy records were kept in locked files and behind locked doors with access limited to the research staff. Electronic records were password protected and made available only to staff who had a need to access data for processing and analysis.

STATISTICAL ANALYSIS

Rates were calculated by the number of assault incidents divided by the total number of hours worked by all nurses during the time period for the given hospital and multiplied by 2000. The rates can then be interpreted as an annual incidence rate per nurse assuming that nurses work on average 2000 hours per year.

The average weekly decrease was calculated through Poisson modeling using Generalized Estimating Equations (GEE) based on the weekly rates of each hospital. In this model, each hospital was treated as a cluster in the analysis and a first order autoregressive error structure was assumed. Slopes were separately pooled across hospitals for both intervention and

control hospitals in the modeling procedure. The conversion of the slope parameters, β_i , using the formula $1 - \exp(\beta_i)$, was used to present the slopes as an average weekly decrease.

RESULTS

Table 1 presents the number of incidents and rates for each hospital in the study for each phase of the study. For hospitals that received the intervention, rates of verbal assaults increased for two hospitals and decreased for two hospitals from before the intervention was applied to after the intervention was applied; rates of physical assaults decreased for 3 hospitals and increased in one hospital from before the intervention was applied to after the intervention was applied; rates of either type of assault decreased for 3 hospitals and increased in one hospital from before the intervention was applied to after the intervention was applied. For hospitals that did not receive the intervention, rates decreased after the first three weeks in all three hospitals whether looking at verbal, physical, or either type of assault.

Table 2 presents the number of incidents and rates of severe assaults for each hospital in the study for each phase of the study. A severe assault was defined as an assault that was scored as a 3 or 4 on the Violence Description Matrix. When comparing the first 3 control weeks to the intervention period, severe verbal assaults decreased in 2 out of the 4 intervention hospitals, severe physical assaults decreased in 2 of the 4 intervention hospitals, and either severe verbal or severe physical assaults decreased in 2 out of the 4 intervention hospitals. For the control hospitals, severe verbal assaults and either severe verbal or severe physical assaults decreased in all three hospitals. Severe physical assaults decreased in 2 out of the three control hospitals.

The average weekly decline for intervention hospitals compared to control hospitals during weeks 4 through 18 are presented in Table 3 based on the GEE models. Overall, incidents of any type of assault decreased during this period for both intervention and control hospitals. However, the only statistically significant decreases were for physical assaults or either type of assaults for only the control hospitals.

DISCUSSION

There was a decline in number of assaults with the control sites declining more than the treatment sites with a significant reduction in physical assaults for the control sites.. It may be that participating in any part of the research study which focused on aggression, both verbal and physical, caused the decline in assaults. By recording immediately both the verbal and the physical aggression, staff are much more sensitive and aware of very low levels of aggression.

It is noteworthy that research subjects showed a decline in assault. This may be the Hawthorne Effect (McCambridge, Wilton, & Elbourne, 2013). In this case, being more aware of assaults and their responsibility in their observation reporting of assault makes the incidence decline. Another possibility is recorder fatigue. The recorders became tired after the study continued for so long or they became very involved in the meeting (observation) and slip on the recording.

In any event, it may be that learning about verbal and physical aggression reduces assault incidence.

STRENGTHS and LIMITATIONS

The advantage of the event counter was that it was possible to record events immediately, which would not otherwise be possible for staff to do. This reduces the possible problem of memory degradation or underreporting, which has been well established (Lanza & Campbell, 1991). The limitation of this recording method is that only totals, not descriptions of the events, are noted (Lanza, Rierdan, Forester, Zeiss, 2009).

Additional limitations is there was not a distinction between physical aggression toward an object and physical aggression toward a person. The study lacked blindness; study sites knew what group (treatment or control) they were in. Also, participants knew that assaults were being counted in the course of the study.

CONCLUSION

Reporting and intervening with assault is the responsibility of everyone not just staff. Patients realized their own value in observing and responding to discussions about aggression and assault. Staff are more sensitive and aware of sharing with the community their reactions to assault. Staff are sometimes surprised by sharing their reactions to assault but patients sense it anyway by the cues given by staff. A discussion about boundaries is important. Staff are to share what is directly related to the patients' behavior and it is not appropriate for staff to just ventilate. The focus is always on patient behavior and with a mutual open exchange of ideas among patients and staff, a safer community meeting develops.

Future research could be undertaken to answer the following:

- to determine more specifically what topics and content were discussed in the control group meetings
- physical aggression could be further refined as aggression against a person versus against an object.
- the study could be replicated using a different aggression scale, and measured both before and every other week for VCPM and control
- to provide an education program to staff and patients about verbal and physical aggressions and their responsibility in addressing assault. The assault rate could be measured both before and after the intervention.
- to further understand why the control group had a significant decrease in patient assault, both groups could repeat the study to see whether the control group had a different assault pattern
- to perform studies that have different interventions could be conducted and compared to hospitals outside the VHA.

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Table 1
Number of Incidents, Annual Assault Rates (with Standard Errors) by Hospital for Each of Three Phases of Intervention Application

	Site	Baseline Rate (Weeks 1–3)			Intervention Rate (Weeks 4–18)			Post-Intervention Rate (Weeks 19–21)		
		Verbal	Physical	Any	Verbal	Physical	Any	Verbal	Physical	Any
Intervention	Hospital A	97 36.98 (5.39)	22 17.31 (3.69)	65 51.14 (6.34)	273 43.70 (2.64)	65 10.40 (1.29)	295 47.22 (2.75)	57 44.26 (5.86)	17 13.20 (3.20)	71 55.13 (6.54)
	Hospital B	93 45.99 (4.77)	41 20.28 (3.17)	114 56.38 (5.28)	197 18.46 (1.32)	112 10.49 (0.99)	273 25.58 (1.55)	10 4.74 (1.50)	1 0.47 (0.47)	10 4.74 (1.50)
	Hospital C	38 23.37 (3.79)	4 2.46 (1.23)	40 24.60 (3.89)	337 42.62 (2.32)	61 7.71 (0.99)	358 45.27 (2.39)	5 3.04 (1.36)	2 1.22 (0.86)	7 4.26 (1.61)
	Hospital D	140 76.17 (6.44)	28 15.23 (2.88)	148 80.52 (6.62)	280 31.62 (1.89)	111 12.54 (1.19)	325 36.71 (2.04)	54 31.18 (4.24)	28 16.17 (3.06)	62 35.80 (4.55)
Control	Hospital E	34 22.19 (3.81)	9 5.87 (1.96)	35 22.85 (3.86)	100 13.32 (1.33)	27 3.60 (0.69)	112 14.92 (1.41)	16 8.06 (2.01)	6 3.02 (1.23)	16 8.06 (2.01)
	Hospital F	58 59.43 (7.80)	14 14.34 (3.83)	59 60.45 (7.87)	168 34.20 (2.64)	52 10.59 (1.47)	172 35.02 (2.67)	16 15.44 (3.86)	1 0.97 (0.97)	16 15.44 (3.86)
	Hospital G	149 136.42 (11.18)	48 43.95 (6.34)	172 157.47 (12.01)	129 21.84 (1.92)	42 7.11 (1.10)	150 25.40 (2.07)	21 16.33 (3.56)	12 9.33 (2.69)	29 22.55 (4.19)

Table 2
Number of Incidents, Annual Severe Rates (with Standard Errors) by Hospital for Each of Three Phases of Intervention Application

Intervention	Site	Baseline Rate (Weeks 1–3)			Intervention Rate (Weeks 4–18)			Post-Intervention Rate (Weeks 19–21)		
		Verbal	Physical	Any	Verbal	Physical	Any	Verbal	Physical	Any
Intervention	Hospital A	0 (0.00)	5 3.93 (1.76)	5 3.93 (1.76)	72 11.52 (1.36)	4 0.64 (0.32)	75 12.00 (1.39)	12 9.32 (2.69)	2 1.55 (1.10)	14 10.87 (2.91)
	Hospital B	7 3.46 (1.31)	8 3.96 (1.40)	14 6.92 (1.85)	12 1.12 (0.32)	11 1.03 (0.31)	22 2.06 (0.44)	2 0.95 (0.67)	0 0.00 (0.00)	2 0.95 (0.67)
	Hospital C	0 (0.00)	0 0.00 (0.00)	0 0.00 (0.00)	46 5.82 (0.86)	3 0.38 (0.22)	49 6.20 (0.89)	0 0.00 (0.00)	0 0.00 (0.00)	0 0.00 (0.00)
	Hospital D	14 7.62 (2.04)	2 1.09 (0.77)	15 8.16 (2.11)	33 3.73 (0.65)	14 1.58 (0.42)	40 4.52 (0.71)	5 2.89 (1.29)	3 1.73 (1.00)	8 4.62 (1.63)
Control	Hospital E	3 1.96 (1.13)	1 0.65 (0.65)	4 2.61 (1.31)	10 1.33 (0.42)	5 0.67 (0.30)	12 1.60 (0.46)	0 0.00 (0.00)	1 0.50 (0.50)	1 0.50 (0.50)
	Hospital F	5 5.12 (2.29)	6 6.15 (2.51)	7 7.17 (2.71)	8 1.63 (0.58)	0 0.00 (0.00)	8 1.63 (2.58)	1 0.97 (0.97)	0 0.00 (0.00)	1 0.97 (0.97)
	Hospital G	10 9.16 (2.90)	3 2.75 (1.59)	13 11.90 (3.30)	19 3.22 (0.74)	2 0.34 (0.24)	21 3.56 (0.78)	0 0.00 (0.00)	0 0.00 (0.00)	0 0.00 (0.00)

Table 3

Percent weekly decrease for change in types of aggression by type of study hospital for intervention phase of study (weeks 4–18)

Incident Type	Intervention (95% CI)	Control (95% CI)
Verbal	0.2% (−6.4%, 6.4%)	4.5% (−0.8%, 9.5%)
Physical	3.1% (−4.0%, 9.7%)	6.7% (1.6%, 11.4%)
Either	0.6% (−5.6%, 6.5%)	5.1% (0.4%, 9.6%)